

LISTING OF THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Original) A test handler comprising:
a platform configured to move semiconductor devices placed on the platform from an onloading position to an offloading position along a predetermined path;
a transfer arm located adjacent the path; and
a plurality of transfer heads connected to the transfer arm that are configured to pick up and transfer semiconductor devices from the platform to a testing position for testing, and thereafter to transfer the semiconductor devices from the testing position to the platform for offloading.
2. (Original) A test handler as claimed in claim 1, wherein the transfer arm comprises a rotary arm.
3. (Original) A test handler as claimed in claim 2, wherein the transfer heads connected to the transfer arm are arranged on a plane that is substantially perpendicular to the predetermined path.
4. (Original) A test handler as claimed in claim 1, including a device precision station positioned such that the semiconductor devices are transferred by the transfer heads to the device precision station for alignment before they are transferred to the testing position.
5. (Original) A test handler as claimed in claim 4, wherein the transfer heads are oriented such that when one transfer head is at the testing position, another transfer head is at a position of the device precision station.
6. (Original) A test handler as claimed in claim 5, wherein the testing position and device precision station are adapted such that testing of a semiconductor device at the testing position

and alignment of another semiconductor device at the device precision station are carried out substantially concurrently.

7. (Original) A test handler as claimed in claim 1, wherein the transfer heads are oriented such that when one transfer head is at a position adjacent the platform, another transfer head is at the testing position.

8. (Original) A test handler as claimed in claim 1, wherein the platform comprises a turntable.

9. (Original) A test handler as claimed in claim 1, including a plurality of carriers on the platform aligned along the predetermined path, each carrier comprising multiple holders for holding multiple semiconductor devices.

10. (Original) A test handler as claimed in claim 1, wherein the transfer arm has a total of four transfer heads connected to it.

11. (Original) A test handler as claimed in claim 1, including a plurality of transfer ports connected to each transfer head, each transfer port being configured to hold one semiconductor device during transfer.

12. (Original) A test handler as claimed in claim 1, including a thermal insulation wall bounding a perimeter of substantially an area occupied by the platform.

13. (Currently Amended) A method for testing semiconductor devices with a test handler comprising the steps of:

- placing the semiconductor devices onto an onloading position of a platform;
- moving the semiconductor devices along a predetermined path;

picking up and transferring semiconductor devices along the path from the platform to a testing position with one of a plurality of transfer heads connected to a transfer arm;
testing the semiconductor devices;
transferring the semiconductor devices from the testing position to the platform; and
thereafter
moving the semiconductor devices to an offloading position for removal from the platform.

14. (Original) A method as claimed in claim 13, wherein the transfer arm comprises a rotary arm.

15. (Original) A method as claimed in claim 14, wherein the transfer heads are arranged along a plane that is substantially perpendicular to the path moved by the semiconductor devices.

16. (Original) A method as claimed in claim 13, including the step of transferring the semiconductor devices to a device precision station and aligning the semiconductor devices before transferring the semiconductor devices to the testing position.

17. (Original) A method as claimed in claim 16, including testing a semiconductor device while aligning another semiconductor device for testing.

18. (Original) A method as claimed in claim 13, wherein the platform comprises a turntable.

19. (Original) A method as claimed in claim 13, including holding a plurality of semiconductor devices simultaneously during transfer to the testing position.

20. (Original) A method as claimed in claim 13, including bounding a perimeter of substantially an area occupied by the platform with a thermal insulation wall.

21. (New) A test handler comprising:

a platform configured to move semiconductor devices placed on the platform from an onloading position of the platform to an offloading position of the platform along a predetermined path;

a transfer arm located adjacent the path; and

a plurality of transfer heads connected to the transfer arm that are configured to pick up and transfer semiconductor devices from the platform to a testing position for testing, and thereafter to transfer the semiconductor devices from the testing position to the platform for offloading at the offloading position of the platform.

22. (New) A test handler as claimed in claim 21, wherein the transfer heads connected to the transfer arm are arranged in a plane that is substantially perpendicular to a plane of the platform.

23. (New) A method for testing semiconductor devices with a test handler comprising the steps of:

placing the semiconductor devices onto an onloading position of a platform;

moving the semiconductor devices on the platform along a predetermined path between the onloading position and an offloading position of the platform;

picking up and transferring semiconductor devices along the path from the platform to a testing position with one of a plurality of transfer heads connected to a transfer arm;

testing the semiconductor devices;

transferring the semiconductor devices from the testing position to the platform; and thereafter

moving the semiconductor devices to the offloading position for removal from the platform.

24. (New) A method as claimed in claim 23, wherein the transfer heads are arranged along a plane that is substantially perpendicular to a plane of the platform.